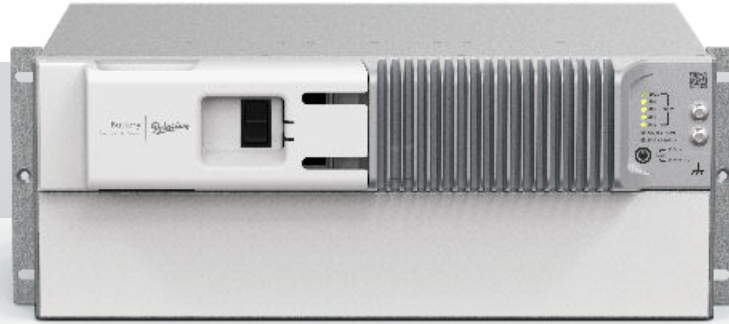




# Battery 19" 4U / 150Ah

SLB48-150-146-5  
15S Series, Generation 5



Polarium Battery is an advanced power backup system for telecom use. Its rechargeable smart lithium-ion battery provides reliable power backup for hybrid, off-grid and grid-connected telecom sites worldwide.

## Safe

All our products are designed with your safety in mind - thoroughly verified and certified for safe operation.

## Simple

Advanced technology made super easy to use. easy to install, maintenance free, charge control.

## Strong

Works in all conditions and environments. Extra protection against dust and moisture for prolonged life.

## Smart

Automatic balancing, automatic reconnect, remote monitoring options and much more.

## Secure

Our unique, patented Anti-Theft Device disables function of batteries if removed from site. It's prepared for optional GPS tracker.

## Sustainable

The lifetime is extraordinary long. It's small, light, maintenance free and can be remotely controlled.

## Technical Specification

Enclosure Size	19" 4U
Lithium Chemistry	LFP
Rated Voltage	48 V
Rated Capacity Ah (0.2C, 25°C to 39 V)	150 Ah
Rated Energy Wh (0.2C, 25°C to 39 V)	7200 Wh
Calendar Life @ 80% SOC	15 years
Peak Discharge Power	6kW for 60 seconds
Discharge Cutoff Current	100 A
End-of-Discharge Voltage (LVBD)**	37.5 - 41 V
Charge Current Limitation (CLD)*	100 A
Charge Voltage for 100% SOC	54.75 V
Operating Temperature Charging	0 to +55°C (32 to 131°F)
Operating Temperature Discharging	-20 to +60°C (-4 to 140°F)
Operating Relative Humidity	According to ETSI 300 019-1-3 class 3.2 (0-95%)
Storage Temperature	-20 to +60°C (-4 to 140°F)
Weight	Approx. 74 Kg (163.1 lbs)
Dimensions mm (in")	W 440 D 577 H 173 (W 17.3" D 22.7" H 6.9")
Circuit breaker	100 A, BMS Controlled, single pole
IP class	IP20
Communication Protocols	RS485, RJ45 (2) ports, Modbus
Safety Standards	IEC62619, IEC62368, UN38.3
Management & Monitoring	Software for PC (Studio) included for full local monitoring and management. Remote connection via Modbus

DS1501465-Rev 1.2

\*If the charge current is 100A or higher, the battery will automatically reduce the charge current to 6-12A temporarily  
\*\*Low Voltage Battery Disconnect (LVBD) will activate when first cell in battery pack has discharged to 2.5V

Data subject to change without notice



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# Battery 19" 4U / 150Ah

SLB48-150-146-5  
15S Series, Generation 5

Constant Current (A) @ 25°C  
Duration (Hours)

End of Discharge Voltage	Constant Current (A) @ 25°C Duration (Hours)														
	1	2	3	4	5	6	7	8	9	10	12	14	16	20	24
50	N/A	58.9	40.6	30.9	24.9	20.9	18.0	15.8	14.0	12.7	10.6	9.1	8.0	6.4	5.3
48.5	N/A	62.9	42.9	32.5	26.1	21.8	18.8	16.4	14.6	13.2	11.0	9.4	8.3	6.6	5.5
47	N/A	66.3	44.8	33.8	27.1	22.7	19.5	17.0	15.1	13.6	11.4	9.8	8.5	6.8	5.7
45.5	N/A	69.0	46.4	34.9	28.0	23.3	20.0	17.5	15.6	14.0	11.7	10.0	8.8	7.0	5.9
44	N/A	71.0	47.5	35.7	28.6	23.8	20.4	17.9	15.9	14.3	11.9	10.2	8.9	7.1	6.0
42.5	N/A	72.1	48.2	36.2	29.0	24.1	20.7	18.1	16.1	14.5	12.0	10.3	9.0	7.2	6.0
41	N/A	72.4	48.4	36.3	29.1	24.2	20.8	18.2	16.1	14.5	12.1	10.4	9.1	7.3	6.0
39.5	N/A	72.4	48.4	36.3	29.1	24.2	20.8	18.2	16.1	14.5	12.1	10.4	9.1	7.3	6.0
38	N/A	72.4	48.4	36.3	29.1	24.2	20.8	18.2	16.1	14.5	12.1	10.4	9.1	7.3	6.0

Constant Power (W) @ 25°C  
Duration (Hours)

End of Discharge Voltage	Constant Power (W) @ 25°C Duration (Hours)														
	1	2	3	4	5	6	7	8	9	10	12	14	16	20	24
50	N/A	2878	1986	1515	1224	1026	883	775	690	622	520	446	391	314	262
48.5	N/A	3061	2091	1587	1279	1070	920	806	718	646	540	463	406	325	271
47	N/A	3217	2181	1649	1325	1107	951	833	741	667	557	477	418	335	279
45.5	N/A	3341	2253	1699	1363	1138	976	855	760	684	570	489	428	342	285
44	N/A	3431	2305	1735	1390	1160	995	870	774	696	580	497	435	348	290
42.5	N/A	3482	2336	1756	1407	1173	1006	880	782	704	587	503	440	352	293
41	N/A	3494	2344	1763	1413	1178	1010	884	786	707	589	505	441	353	294
39.5	N/A	3494	2344	1763	1413	1178	1010	884	786	707	589	505	441	353	294
38	N/A	3494	2344	1763	1413	1178	1010	884	786	707	589	505	441	353	294

Energy (Wh) @ 25°C  
Duration (Hours)

End of Discharge Voltage	Energy (Wh) @ 25°C Duration (Hours)					
	1	2	3	4	5	10
50	N/A	5757	5958	6059	6118	6219
48.5	N/A	6121	6274	6350	6393	6465
47	N/A	6433	6543	6597	6627	6674
45.5	N/A	6683	6759	6795	6815	6842
44	N/A	6862	6915	6939	6952	6965
42.5	N/A	6965	7007	7026	7035	7042
41	N/A	6987	7033	7053	7063	7070
39.5	N/A	6987	7033	7053	7063	7070
38	N/A	6987	7033	7053	7063	7070

State of Charge (%) vs Voltage (V)  
Discharge Rate

State of Charge	State of Charge (%) vs Voltage (V) Discharge Rate		
	0.2 C	0.5 C	1.0 C
100%	51.3	51.3	N/A
90%	49.5	48.9	N/A
80%	49.4	48.8	N/A
70%	49.2	48.6	N/A
60%	49.0	48.5	N/A
50%	48.9	48.4	N/A
40%	48.8	48.2	N/A
30%	48.5	48.0	N/A
20%	48.0	47.6	N/A
10%	47.4	46.9	N/A
0%	40.5	40.4	N/A

## Technical Drawings

